0/005,751

November 7, 2001

- 43. (Added) The microprocessor controlled device of claim 21, wherein the front of the display screen faces the base when the device is closed.
- 44. (Added) The microprocessor controlled device of claim 39, further including orienting the display towards the base when the device is closed.
 - 45. (Added) A microprocessor controlled device comprising:
 - a base, having a front edge and a back edge;

a pressure sensitive screen, the pressure sensitive screen having a top edge and bottom edge, the pressure sensitive screen coupled to the base; and,

screen adjustment means, said screen adjustment means increasing the distance between the position of the bottom edge of the screen relative to the back edge of the base in order to stabilize the device upon exercise of pressure upon the pressure sensitive screen.

- 46. (Added) A computer comprising:
- a base having a front edge and a back edge;
- a pressure sensitive screen, the pressure sensitive screen having a top edge and a bottom edge; and,

a hinge coupling the screen to the base, said hinge, when opened, displacing the screen forward from but substantially parallel to the rear edge of the base. in order to stabilize the computer upon exercise of pressure upon the pressure sensitive screen.

II. <u>RESPONSE</u>

This amendment is in response to the Office Action dated May 3, 2002. Applicant has amended claims 1-21, 25, 30, 35, and 38-41, and adds claims 42-46. Applicant responds to the Examiner's objections in turn.

1. Drawings

Applicant notes that corrected drawings were submitted on August 3, 2002. In addition, a Preliminary Amendment was submitted on March 7, 2002 which corrected certain typographical errors in the specification to bring the drawings into compliance with 37 C.F.R. §1.84(p)(4).

Applicant respectfully submits that the Examiner's objections to the drawings have been overcome.



0/005,751

: November 7, 2001

2. Claim Rejections under 35 U.S.C. §112

Applicant respectfully submits that claims 1-41 of the above-titled application fully conform with the requirements of 35 U.S.C. §112 ¶ 2 as definite.

The structural cooperative relationships of the limitations for each of claims 1-41 are fully laid out with respect to a rotational force related to the device tipping over.

Claims 1-41 of the above-titled application, as amended, provide for application of a force or pressure to a force sensitive display, regardless of the source of that force. The Examiner has suggested that, because both a pen and a touch can be used to put pressure on a force sensitive screen, there is not unity of invention in the above claims. Applicant respectfully disagrees. Specifically, a microprocessor controlled device with a force sensitive display is a single invention that contains a display responsive to the application of force. This is in contrast, for example, to a display responsive to the application of light, or a display responsive to the application of heat. The Applicant respectfully submits that this rejection has been overcome.

Finally, claims 1-41, as amended, provide necessary structure to perform the desired function.

It is believed by the Applicant that claims 1-41, as amended, are definite under 35 U.S.C. § 112 ¶ 2, and that the Examiner's rejections on this basis should be removed.

3. Claim Rejections under 35 U.S.C. §103

Applicant respectfully submits that claims 1-41 are not obvious in light of Boothroyd (U.S. Pat. No. 5,267,123).

A. Claims 1-20

In particular, with respect to claims 1, 18 and the claims dependent thereon, Boothroyd nowhere discloses, motivate or suggests a microprocessor controlled device having an upper leaf and a lower leaf, said upper leaf having a display screen configured to accept user input through the application of a force applied to the surface of the screen, said upper leaf mounted on said lower leaf with the screen oriented at a comfortable viewing angle for a user when the lower leaf is in a generally horizontal orientation, said lower leaf having a front and rear edge, said upper leaf positioned such that the maximum force typically applied to the uppermost force sensitive portion of the display screen in ordinary use is less than that needed to cause the microprocessor controlled device to tip backwards while positioned on a generally

: 0/005,751

November 7, 2001

horizontal surface, but would cause such tipping if the same upper leaf were mounted at the rear edge of the same lower leaf with the screen at the same comfortable viewing angle. (emphasis added)

First, Boothroyd nowhere discloses, motivates or suggests application of a force applied to the surface of the screen, but only use of a light pen with the screen.

Second, assuming, <u>arguendo</u>, that Boothroyd did disclose application of a force to the display screen, nowhere does Boothroyd suggest, motivate or disclose a position for said display that does not cause tipping "but would cause such tipping if the same upper leaf were mounted at the rear edge of the same lower leaf with the screen at the same comfortable viewing angle." The dependant claims include further limitations that further distinguish over the Boothroyd.

As Boothroyd does not disclose the claimed invention, Applicant respectfully submits that the Examiner's rejection with respect to claim 1 has been overcome.

B. Claims 21-24

With respect to claim 21 and the claims dependent thereon, in addition to the above distinctions between the present claims and Boothroyd, Boothroyd further does not disclose, suggest or motivate a limitation wherein "any force of more than 220 percent of the typical force applied perpendicular to the screen at a top most touch sensitive portion of the screen causes the screen and base to tip." Nowhere is such a limitation present in Boothroyd, and such a limitation is neither motivated nor inherent in Boothroyd's use of a light pen. Specifically, even if a light pen were considered a type of force sensitivity, application of 220 percent of the typical light applied would never cause the device of Boothroyd to tip over.

C. Claims 25-29

With respect to claim 25 and claims dependent thereon, in addition to the above distinctions, Boothroyd further does not disclose, suggest or motivate "a base having a front edge and a back edge, said base having a first weight." (emphasis added). In addition, Boothroyd does not disclose, suggest or motivate "a force sensitive screen having a top and a bottom, said screen mounted when in a viewing position to said base at an angle which is tilted with respect to the base, the screen having a second weight being no less than 33 percent of the first weight." The absence of any relative first and second weight, the absence of a force sensitive screen, and the absence of the screen weighing no less than 33 percent of the

0/005,751

November 7, 2001

base demand that Boothroyd be removed as a reference with respect to claim 25.

D. Claims 30-34

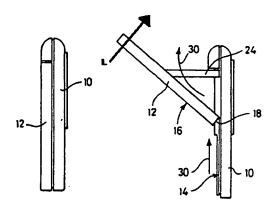
With respect to claim 30 and claims dependent thereon, in addition to the above distinctions, Boothroyd further does not disclose, suggest or motivate a microprocessor controlled device comprising: a base; a force sensitive screen having a length and width defining a screen area, said screen mounted when in a viewing position to said base at an angle which is tilted with respect to the base; said screen mounted to the base so that at least 30 percent but not more than 80 percent of the screen area is positioned directly above the base; and said screen positioned such that when any force of up to 220 percent of a typical force is applied perpendicular to the screen at a top most pressure sensitive portion of the screen, the screen and base do not tip over when the base is on a flat surface and the base is not permitted to slide rearwardly. (emphasis added) In particular, Boothroyd does not include a force sensitive screen, and nowhere suggests, motivates or discloses a screen mounted on the base such that at least 30 percent but no more than 80 percent of the screen is positioned directly above the base. In contrast, Boothroyd's screen is almost entirely directly above the base. (See Boothroyd, col. 4, 11. 9-13) ("It will be noted from a comparison of FIGS. 1 and 4 that the plan are a of the open case is not substantially greater than the plan area of the closed case, which is advantageous when the computer is to be used in a confined space, e.g. on the tray of an aeroplane seat.") (see also Figs. 3 and 5 reproduced below). Thus, these claims are in condition for allowance.

E. Claims 35-37

With respect to claim 35 and dependent claims thereon, in addition to the above distinctions, Boothroyd nowhere discloses, suggests or motivates "a force sensitive screen mounted to said base at an angle which is tilted with respect to said base to permit easy viewing of the screen; and said screen being positioned with respect to the base such that a line perpendicular to the screen and passing through the top most force sensitive portion of the screen also passes through the base." (emphasis added). Due to the small dimensional variation of the Boothroyd device, a perpendicular line passed through the top most portion of the Boothroyd screen does not pass through the base. Figures 3 and 5 of Boothroyd are replicated below, with the perpendicular line ("L") limitation of claim 35 of the present application added for explanatory purposes:

: 0/005,75

November 7, 2001



As exemplified from the above figure, Boothroyd does not meet this limitation. See, by comparison, Fig. 8(c) of the present application, which does meet this limitation. As Boothroyd nowhere suggests, motivates or describes the limitations of claim 35 or claims dependent thereon, the Applicant respectfully submits that this reference has been overcome.

F. Claims 38-42

Finally, claims 38, 39 and claims dependent thereon are not described, suggested or motivated by Boothroyd. Claim 38 includes "[a] method of positioning a force sensitive display with respect to a microprocessor controlled device to prevent tipping, the method comprising the acts of: providing a base having a front edge and a back edge; providing a display having a top and bottom, said display coupled to said base; orienting the display at an angle to the base to provide for viewing, wherein the bottom of the display is positioned between the front edge and the back edge of the base such that a torque typically applied to the top most force sensitive part of the display is less than that needed to cause the computer to tip about a rotational axis, but said torque would be sufficient to cause tipping if the display were hinged to the base in a conventional clam shell arrangement at the back edge of the base." For the same reasons as discussed above for prior claims, Boothroyd lacks any description, suggestion or motivation of a force sensitive display or any level of force (torque, pressure or otherwise) that would cause the device of Boothroyd to tip if it were in a conventional clamshell arrangement.

Indeed, as Boothroyd only employs a light pen, one of skill in the art would have no motivation to even consider the problems addressed by the present application, let alone the solution of the present application.

0/005,75

November 7, 2001

G. New Claims

New claims 42-46, while not subject to any rejection based on Boothroyd, do not have an outward facing display as in Boothroyd. The outward facing display of Boothroyd is both highly inconvenient and fragile, subjecting the most sensitive part of the device to damage. Moreover, there is no simple way to adopt the Boothroyd device with a inward facing display (as in most conventional laptops). If Boothroyd's device were used with such a display, the result would be the screen facing away from the user. It would be a substantial flaw and no motivation to investigate the present application for any user. Nor does the Boothroyd device *increase* the distance between the bottom of the display and the rear of the base as claimed in claims 45 and 46.

III. CONCLUSION

Applicant respectfully submits that Boothroyd has been overcome, and that the present application is definite under 35 U.S.C. § 112 ¶ 2. Thus, Applicant respectfully submits that the above-titled application is in an acceptable condition for allowance. Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE MARTENS, OLSON & BEAR, LLP

Who & Rose

Dated: | | | | 102

By:

Arthur S. Rose

Registration No. 28,038

Attorney of Record

Customer No. 20,995

(949) 760-0404

AMEND

H:\DOCS\DTH\DTH-2159.DOC / 103102

10/005,751

Filed

November 7, 2001

Exhibit 1: Mark-Up of Amended Claims

Exhibit 1

Deleted language is [crossed out], added language is underlined, and unaltered language is in plain text.

- (Amended) [A computer with a touch sensitive or pen sensitive display, 1. wherein A microprocessor controlled device having an upper leaf and a lower leaf, said upper leaf having a display screen configured to accept user input through the application of a force applied to the surface of the screen, said upper leaf mounted on said lower leaf with the screen oriented at a comfortable viewing angle for a user when the lower leaf is in a generally horizontal orientation, said lower leaf having a front and rear edge, [the position of the fully opened display is such that the maximum torque typically applied to the top most pen or touch sensitive part of the display, in relation to a rotational axis about which the computer would rotate if it were to tip backwards, is less than that needed to cause the computer to tip backwards about that rotational axis, Isaid upper leaf positioned such that the maximum force typically applied to the uppermost force sensitive portion of the display screen in ordinary use is less than that needed to cause the microprocessor controlled device to tip backwards while positioned on a generally horizontal surface, but would [be sufficient to-] cause such tipping if the [display] same upper leaf were [hinged in a conventional clam shell arrangement] mounted at the rear edge of the [computer]-same lower leaf with the screen at the same comfortable viewing angle.
- (Amended) The [computer]microprocessor controlled device of claim 1, 2. wherein the [torque]force is less than that needed to cause tipping because the length of the moment arm, [i.e.]defined by the length of the distance from the point of application of the turning force to the rotational axis, is less than the length of the moment arm would be if the display were hinged to the lower leaf at a fixed point at the rear of the [computer]lower leaf in a conventional clam shell arrangement.
- (Amended) The [eomputer] microprocessor controlled device of claim 2, 3. wherein the force is less than that needed to cause tipping because the length of the

10/005,751

November 7, 2001

Exhibit 1

Filed

moment arm is reduced by using a hinge that will cause the display, when fully opened, to be displaced forward from, but substantially parallel to, an ordinary, open position it [could]would be in if the [display]upper leaf were hinged to the lower leaf at a fixed point at the rear of the [computer] lower leaf.

- (Amended) The [computer]microprocessor controlled device of claim 3, 4. wherein the [torque]force is less than that needed to cause tipping for the further reason that the center of gravity of the [computer]device has been displaced forward, thereby increasing the magnitude of the torque resisting backwards tipping.
- (Amended) The [computer]microprocessor controlled device of claim 2, 5. wherein the length of the moment arm is reduced by using a hinge that will cause the display, when fully opened, to be displaced downwards from, but substantially parallel to, an ordinary, open position it could be in if the displayupper leaf were hinged to the lower leaf at a fixed point at the rear of the computer lower leaf.
- (Amended) The [eomputer]microprocessor controlled device of claim 2, 6. wherein the length of the moment arm is reduced by extending the rear of the [computer]lower leaf.
- (Amended) The [computer]microprocessor controlled device of claim 6, 7. wherein the extension is achieved using rearward feet which are permanent.
- (Amended) The [computer]microprocessor controlled device of claim 6, 8. wherein the extension is achieved using rearward feet which extend back as the display opens up.
- (Amended) The [eomputer]microprocessor controlled device of claim 6, 9. wherein the extension is achieved using rearward feet which are manually extendible.

Appl. No. : 10/005,751 Exhibit 1
Filed : November 7, 2001

10. (Amended) The [eomputer]microprocessor controlled device of claim 1, wherein the display has pen and touch sensitive buttons, regions, or drop-down menu items which are positioned at or near the top most part of the display.

- 11. (Amended) The [computer]microprocessor controlled device of claim 1, further comprising a keyboard coupled to the lower leaf which extends forward as the display is raised and which tilts slightly towards the user during its extension.
- 12. (Amended) The [eomputer]microprocessor controlled device of claim 11, wherein the [torque]force typically applied to the part of the keyboard closest to the user is less than that needed to cause the computer to tip forward, in relation to a rotational axis about which the [eomputer]device would rotate if it were to tip forwards[, is less than that needed to cause the computer to tip forward about that rotational axis.].
- 13. (Amended) The [eomputer]microprocessor controlled device of claim 1, wherein the [eomputer]device is of a size to be classified as a palmtop computer.
- 14. (Amended) The [eomputer]microprocessor controlled device of claim 1, wherein the [eomputer]device is of a size to be classified as a sub-notebook computer.
- 15. (Amended) The [eomputer]microprocessor controlled device of claim 1, wherein the [eomputer]device is of a size to be classified as a notebook computer.
- 16. (Amended) The [eomputer]microprocessor controlled device of claim 1, further comprising a keyboard coupled to the lower leaf, in which a casing for the display has similar dimensions in plan to the keyboard so that in the closed position the casing for the display substantially covers the keyboard.
- 17. (Amended) The [computer]microprocessor controlled device of claim 1, further comprising a lower leaf base and an upper leaf casing for the display in which the rear of the fully opened casing rests directly upon a part of the base.

10/005,751

Exhibit 1

Filed

November 7, 2001

(Amended) [A computer with a touch sensitive or pen sensitive display, 18. wherein] A microprocessor controlled device comprising: an upper leaf and a lower leaf; said upper leaf having a display screen configured to accept user input through the application of a force applied to the surface of the screen; said upper leaf mounted on said lower leaf with the screen oriented at a comfortable viewing angle for a user when the lower leaf is in a generally horizontal orientation; said lower leaf having a front and rear edge; [the position of the fully opened display is such that the maximum torque typically applied by a finger or a pen to the top most pen or touch sensitive part of the display, in relation to a rotational axis about which the computer would rotate if it were to tip backwards, is less than that needed to cause the computer to tip backwards about that rotational axis, and said upper leaf positioned such that the maximum force typically applied to the uppermost force sensitive portion of the display screen in ordinary use is less than that needed to cause the microprocessor controlled device to tip backwards while positioned on a generally horizontal surface, [further including]but would cause such tipping if the same upper leaf were mounted at the rear edge of the same lower leaf with the screen at the same comfortable viewing angle; and, a hinge coupling said upper leaf and said lower leaf that allows the base of the display to move forwards during either opening or closing- of the device.

- 19. (Amended) The [computer]microprocessor controlled device of claim 18, wherein the display has pen and touch sensitive buttons, regions, or drop-down menu items which are positioned at or near the top most part of the display.
- 20. (Amended) The [eomputer]microprocessor controlled device of claim 18, further comprising a lower leaf base and an upper leaf casing for the display in which the rear of the fully opened casing rests directly upon a part of the base.
 - 21. (Amended) A microprocessor controlled device comprising: a base having a front edge and a back edge;

Filed

10/005,751

November 7, 2001

Exhibit 1

a [touch or pen]pressure sensitive screen having a top and a bottom, said screen mounted to said base;

said screen, when in a viewing position, at an angle which is tilted with respect to the base;

and wherein at least a portion of the screen-, when in a viewing position, is positioned inward from a rotational axis of the base-[when in a viewing position, the], such that a first equivalent torque of the portion of the screen positioned inward from a rotational axis of the base combined with [the]a second equivalent torque of the base [being lis at least 30 percent greater than [the]a third equivalent torque of the portion of the screen positioned outward of the back edge of the base combined with [the]a fourth equivalent torque from a typical force applied perpendicular to the screen at a top most touch sensitive portion of the screen,

thereby preventing the screen and base from tipping over when the base is on a flat surface and the base is not permitted to slide rearwardly, and

wherein any force of more than 220 percent of the typical force applied perpendicular to the screen at a top most touch sensitive portion of the screen causes the screen and base to tip.

- (Amended) A microprocessor controlled device comprising: 25.
- a base having a front edge and a back edge, said base having a first weight;
- a [touch or pen-]force sensitive screen having a top and a bottom, said screen mounted when in a viewing position to said base at an angle which is tilted with respect to the base, the screen having a second weight being no less than 33 percent of the first weight;

and wherein the bottom of the screen is positioned between the front edge and the back edge of the base, and said screen further positioned such that when any force of up to 220 percent of a typical force is applied perpendicular to the screen at a top most touch sensitive portion of the screen the base and the screen do not tip over when the base is on a flat surface and the base is not permitted to slide rearwardly.

10/005,751

November 7, 2001

Exhibit 1

(Amended) A microprocessor controlled device comprising: 30.

a base;

a [touch or pen-]force sensitive screen having a length and width defining a screen area, said screen mounted when in a viewing position to said base at an angle which is tilted with respect to the base;

said screen mounted to the base so that at least 30 percent but not more than 80 percent of the screen area is positioned directly above the base; and said screen positioned such that when any force of up to 220 percent of a typical force is applied perpendicular to the screen at a top most [touch]pressure sensitive portion of the screen, the screen and base do not tip over when the base is on a flat surface and the base is not permitted to slide rearwardly.

- (Amended) A microprocessor controlled device comprising: 35.
- a base having a length and a width, said base adapted to rest on a horizontal flat surface;
- a [touch or pen]force sensitive screen mounted to said base at an angle which is tilted with respect to said base to permit easy viewing of the screen; and

said screen being positioned with respect to the base such that a line perpendicular to the screen and passing through the top most [touch] force sensitive portion of the screen also passes through the base.

(Amended) A method of positioning a [pen or touch] force sensitive 38. display with respect to a [eomputer]microprocessor controlled device to prevent tipping, the method comprising the acts of:

providing a base having a front edge and a back edge;

providing a display having a top and bottom, said display coupled to said base;

orienting the display at an angle to the base to provide for viewing, wherein a-the bottom of the display is positioned between the front edge and the back edge of the base

Filed

10/005,751

November 7, 2001

such that a torque typically applied to the top most [pen-or touch] force sensitive part of the display is less than that needed to cause the computer to tip about a rotational axis, but said torque would be sufficient to cause tipping if the display were hinged to the base in a conventional clam shell arrangement at the back edge of the base.

(Amended) A method of designing a [computer]microprocessor controlled 39. device with a touch sensitive or pen sensitive display, comprising the steps of:

providing a base having at least one edge;

providing a display having a top and bottom, said display coupled to said base;

arranging the position of the fully opened display such that the maximum torque typically applied to the top most [pen or touch] force sensitive part of the display, in relation to a rotational axis about which the [computer]device would rotate if it were to tip backwards, is less than that needed to cause the computer to tip backwards about that rotational axis, but, if the display were hinged to the base in a conventional clam shell arrangement at the rear of the [computer]device, said torque would be sufficient either to cause such tipping or to cause the display to be rotated away from a normal viewing position.

- (Amended) The method of claim 39, wherein the [computer]device is a palm top computer and the force associated with the torque typically applied to the top most pen or touch sensitive part of the display is 80 g-force.
- (Amended) The method of claim 39, wherein the step of arranging is 41. achieved by using a hinge that will cause the display, when fully opened, to be displaced forward from, but substantially parallel to, an ordinary, open position it could be in if the display were hinged to the base at a fixed point at the rear of the [computer]device.

H:\DOCS\DTH\DTH-2162.DOC 110102

10/005,751 November 7, 2001



Exhibit 2: All Claims in Applicaton, as Amended

1. (Amended) A microprocessor controlled device having an upper leaf and a lower leaf,

said upper leaf having a display screen configured to accept user input through the application of a force applied to the surface of the screen,

said upper leaf mounted on said lower leaf with the screen oriented at a comfortable viewing angle for a user when the lower leaf is in a generally horizontal orientation,

said lower leaf having a front and rear edge,

said upper leaf positioned such that the maximum force typically applied to the uppermost force sensitive portion of the display screen in ordinary use is less than that needed to cause the microprocessor controlled device to tip backwards while positioned on a generally horizontal surface, but would cause such tipping if the same upper leaf were mounted at the rear edge of the same lower leaf with the screen at the same comfortable viewing angle.

- 2. (Amended) The microprocessor controlled device of claim 1, wherein the force is less than that needed to cause tipping because the length of the moment arm, defined by the length of the distance from the point of application of the turning force to the rotational axis, is less than the length of the moment arm would be if the display were hinged to the lower leaf at a fixed point at the rear of the lower leaf in a conventional clam shell arrangement.
- 3. (Amended) The microprocessor controlled device of claim 2, wherein the force is less than that needed to cause tipping because the length of the moment arm is reduced by using a hinge that will cause the display, when fully opened, to be displaced forward from, but substantially parallel to, an ordinary, open position it would be in if the upper leaf were hinged to the lower leaf at a fixed point at the rear of the lower leaf.
- 4. (Amended) The microprocessor controlled device of claim 3, wherein the force is less than that needed to cause tipping for the further reason that the center of

November 7, 2001



gravity of the device has been displaced forward, thereby increasing the magnitude of the torque resisting backwards tipping.

- 5. (Amended) The microprocessor controlled device of claim 2, wherein the length of the moment arm is reduced by using a hinge that will cause the display, when fully opened, to be displaced downwards from, but substantially parallel to, an ordinary, open position it could be in if the upper leaf were hinged to the lower leaf at a fixed point at the rear of the lower leaf.
- 6. (Amended) The microprocessor controlled device of claim 2, wherein the length of the moment arm is reduced by extending the rear of the lower leaf.
- 7. (Amended) The microprocessor controlled device of claim 6, wherein the extension is achieved using rearward feet which are permanent.
- 8. (Amended) The microprocessor controlled device of claim 6, wherein the extension is achieved using rearward feet which extend back as the display opens up.
- 9. (Amended) The microprocessor controlled device of claim 6, wherein the extension is achieved using rearward feet which are manually extendible.
- 10. (Amended) The microprocessor controlled device of claim 1, wherein the display has pen and touch sensitive buttons, regions, or drop-down menu items which are positioned at or near the top most part of the display.
- 11. (Amended) The microprocessor controlled device of claim 1, further comprising a keyboard coupled to the lower leaf which extends forward as the display is raised and which tilts slightly towards the user during its extension.
- 12. (Amended) The microprocessor controlled device of claim 11, wherein the force typically applied to the part of the keyboard closest to the user is less than that

Filed:

November 7, 2001

Exhib

needed to cause the computer to tip forward, in relation to a rotational axis about which the device would rotate if it were to tip forwards.

- 13. (Amended) The microprocessor controlled device of claim 1, wherein the device is of a size to be classified as a palmtop computer.
- 14. (Amended) The microprocessor controlled device of claim 1, wherein the device is of a size to be classified as a sub-notebook computer.
- 15. (Amended) The microprocessor controlled device of claim 1, wherein the device is of a size to be classified as a notebook computer.
- 16. (Amended) The microprocessor controlled device of claim 1, further comprising a keyboard coupled to the lower leaf, in which a casing for the display has similar dimensions in plan to the keyboard so that in the closed position the casing for the display substantially covers the keyboard.
- 17. (Amended) The microprocessor controlled device of claim 1, further comprising a lower leaf base and an upper leaf casing for the display in which the rear of the fully opened casing rests directly upon a part of the base.
 - 18. (Amended) A microprocessor controlled device comprising: an upper leaf and a lower leaf;

said upper leaf having a display screen configured to accept user input through the application of a force applied to the surface of the screen;

said upper leaf mounted on said lower leaf with the screen oriented at a comfortable viewing angle for a user when the lower leaf is in a generally horizontal orientation;

said lower leaf having a front and rear edge;

said upper leaf positioned such that the maximum force typically applied to the uppermost force sensitive portion of the display screen in ordinary use is less than that needed to cause the microprocessor controlled device to tip backwards while positioned

Filed

November 7, 2001



on a generally horizontal surface, but would cause such tipping if the same upper leaf were mounted at the rear edge of the same lower leaf with the screen at the same comfortable viewing angle; and,

a hinge coupling said upper leaf and said lower leaf that allows the base of the display to move forwards during either opening or closing of the device.

- (Amended) The microprocessor controlled device of claim 18, wherein the 19. display has pen and touch sensitive buttons, regions, or drop-down menu items which are positioned at or near the top most part of the display.
- (Amended) The microprocessor controlled device of claim 18, further 20. comprising a lower leaf base and an upper leaf casing for the display in which the rear of the fully opened casing rests directly upon a part of the base.
 - (Amended) A microprocessor controlled device comprising: 21.
 - a base having a front edge and a back edge;
 - a pressure sensitive screen having a top and a bottom,
 - said screen mounted to said base;

said screen, when in a viewing position, at an angle which is tilted with respect to the base;

and wherein at least a portion of the screen, when in a viewing position, is positioned inward from a rotational axis of the base, such that a first equivalent torque of the portion of the screen positioned inward from a rotational axis of the base combined with a second equivalent torque of the base is at least 30 percent greater than a third equivalent torque of the portion of the screen positioned outward of the back edge of the base combined with a fourth equivalent torque from a typical force applied perpendicular to the screen at a top most touch sensitive portion of the screen,

thereby preventing the screen and base from tipping over when the base is on a flat surface and the base is not permitted to slide rearwardly, and

wherein any force of more than 220 percent of the typical force applied perpendicular to the screen at a top most touch sensitive portion of the screen causes the screen and base to tip.

November 7, 2001



22. (Unchanged) The microprocessor controlled device of claim 21, wherein the typical force is approximately 80 g-forces.

- 23. (Unchanged) The microprocessor controlled device of claim 21, wherein the device is a palmtop computer.
- 24. (Unchanged) The microprocessor controlled device of claim 21, wherein the device is a sub-notebook computer.
 - 25. (Amended) A microprocessor controlled device comprising:
 - a base having a front edge and a back edge, said base having a first weight;
- a force sensitive screen having a top and a bottom, said screen mounted when in a viewing position to said base at an angle which is tilted with respect to the base, the screen having a second weight being no less than 33 percent of the first weight;

and wherein the bottom of the screen is positioned between the front edge and the back edge of the base, and said screen further positioned such that when any force of up to 220 percent of a typical force is applied perpendicular to the screen at a top most touch sensitive portion of the screen the base and the screen do not tip over when the base is on a flat surface and the base is not permitted to slide rearwardly.

- 26. (Unchanged) The microprocessor controlled device of claim 25, wherein the typical force is approximately 80 g-forces.
- 27. (Unchanged) The microprocessor controlled device of claim 25, wherein the first weight is approximately 245 grams.
- 28. (Unchanged) The microprocessor controlled device of claim 25, wherein the second weight is approximately 107 grams.
- 29. (Unchanged) The microprocessor controlled device of claim 25, wherein the device is a palmtop computer.

November 7, 2001



(Amended) A microprocessor controlled device comprising: 30.

a base;

a force sensitive screen having a length and width defining a screen area, said screen mounted when in a viewing position to said base at an angle which is tilted with respect to the base;

said screen mounted to the base so that at least 30 percent but not more than 80 percent of the screen area is positioned directly above the base; and said screen positioned such that when any force of up to 220 percent of a typical force is applied perpendicular to the screen at a top most pressure sensitive portion of the screen, the screen and base do not tip over when the base is on a flat surface and the base is not permitted to slide rearwardly.

- (Unchanged) The microprocessor controlled device of claim 30, wherein 31. the typical force is approximately 80 g-forces.
- (Unchanged) The microprocessor controlled device of claim 30, wherein 32. the device pivots about feet mounted to the base.
- (Unchanged) The microprocessor controlled device of claim 30, wherein 33. the device is a palmtop computer.
- (Unchanged) The microprocessor controlled device of claim 30, wherein 34. the device is a notebook computer.
 - (Amended) A microprocessor controlled device comprising: 35.
- a base having a length and a width, said base adapted to rest on a horizontal flat surface:
- a force sensitive screen mounted to said base at an angle which is tilted with respect to said base to permit easy viewing of the screen; and

said screen being positioned with respect to the base such that a line perpendicular to the screen and passing through the top most force sensitive portion of the screen also passes through the base.

10/005,751 November 7, 2001



- 36. (Unchanged) The microprocessor controlled device of claim 35, wherein the angle is in a range of 21 degrees to 31 degrees.
- 37. (Unchanged) The microprocessor controlled device of claim 35, wherein the angle is 26 degrees.
- 38. (Amended) A method of positioning a force sensitive display with respect to a microprocessor controlled device to prevent tipping, the method comprising the acts of:

providing a base having a front edge and a back edge;

providing a display having a top and bottom, said display coupled to said base;

orienting the display at an angle to the base to provide for viewing, wherein the bottom of the display is positioned between the front edge and the back edge of the base such that a torque typically applied to the top most force sensitive part of the display is less than that needed to cause the computer to tip about a rotational axis, but said torque would be sufficient to cause tipping if the display were hinged to the base in a conventional clam shell arrangement at the back edge of the base.

39. (Amended) A method of designing a microprocessor controlled device with a touch sensitive or pen sensitive display, comprising the steps of:

providing a base having at least one edge;

providing a display having a top and bottom, said display coupled to said base;

arranging the position of the fully opened display such that the maximum torque typically applied to the top most force sensitive part of the display, in relation to a rotational axis about which the device would rotate if it were to tip backwards, is less than that needed to cause the computer to tip backwards about that rotational axis, but, if the display were hinged to the base in a conventional clam shell arrangement at the rear of the device, said torque would be sufficient either to cause such tipping or to cause the display to be rotated away from a normal viewing position.

November 7, 2001



- 40. (Amended) The method of claim 39, wherein the device is a palm top computer and the force associated with the torque typically applied to the top most pen or touch sensitive part of the display is 80 g-force.
- 41. (Amended) The method of claim 39, wherein the step of arranging is achieved by using a hinge that will cause the display, when fully opened, to be displaced forward from, but substantially parallel to, an ordinary, open position it could be in if the display were hinged to the base at a fixed point at the rear of the device.
- 42. (Added) The microprocessor controlled device of claim 1, wherein the fron of the display screen faces towards the base when the device is closed.
- 43. (Added) The microprocessor controlled device of claim 21, wherein the front of the display screen faces the base when the device is closed.
- 44. (Added) The microprocessor controlled device of claim 39, further including orienting the display towards the base when the device is closed.
 - 45. (Added) A microprocessor controlled device comprising:
 - a base, having a front edge and a back edge;
- a pressure sensitive screen, the pressure sensitive screen having a top edge and bottom edge, the pressure sensitive screen coupled to the base; and,

screen adjustment means, said screen adjustment means increasing the distance between the position of the bottom edge of the screen relative to the back edge of the base in order to stabilize the device upon exercise of pressure upon the pressure sensitive screen.

- 46. (Added) A computer comprising:
- a base having a front edge and a back edge;
- a pressure sensitive screen, the pressure sensitive screen having a top edge and a bottom edge; and,
 - a hinge coupling the screen to the base, said hinge, when opened, displacing the

10/005,751

Filed

November 7, 2001

screen forward from but substantially parallel to the rear edge of the base. in order to stabilize the computer upon exercise of pressure upon the pressure sensitive screen.

H:\DOCS\DTH\DTH-2161.DOC 110102